

LAS&T PROCEDURES AS OF SEPT 30, 2013

Note: this list is subject to change.

ANALYTICAL PROCEDURES

LA-211-102: Determination of Free OH-/H+ Using Metrohm Titrand
LA-211-105: Caustic Ratio Determination of Waste Analysis
LA-212-105: pH Determination on Solid Matrix Samples
LA-212-106: pH Determination of Aqueous Samples
LA-218-111: Tritium Analysis by Liquid Scintillation Counting
LA-218-114: Tritium By Lachat Micro-Dist and Liquid Scintillation Counting
LA-218-116, Tritium Analysis Using Tritium Column and Liquid Scintillation Counting
LA-220-101: High Level Strontium-90 in Aqueous Samples
LA-220-103: Strontium-90 in Leachates of Soil, Vegetation, Air Filters, and Other Solid Samples
LA-220-104: Strontium-90 in Water by Carbonate Precipitation
LA-265-101: Spectrophotometric Determination of Hexavalent Chromium
LA-285-102: Determination of Nickel-63
LA-325-109: IH Vapor Tubes Mercury Analysis Using the FIMS-400
LA-325-110: Total Mercury Analysis by Using the Perkin-Elmer FIMS-400
LA-342-100: Determination of Carbon by Hot Persulfate Oxidation and Coulometric Detection
LA-344-104: Total Organic Carbon (TOC) Combustion Tube Change
LA-344-105: Determination of Carbon in Solutions by Combustion and Coulometry
LA-348-104: Carbon-14 in Small Volume Sample by Persulfate Oxidation and Liquid Scintillation Counting
LA-361-101: Determination of Sulfide by Microdistillation and Ion Selective Electrode Analysis
LA-365-132: Determination Of Selenium-79
LA-378-103: Determination of I-129 In Waste Tank Sample
LA-378-104: Iodine-129 in Tank Farm Solids
LA-378-105: Determination of Iodine-129 in Soil
LA-438-101: Determination of Technetium-99 by Solvent Extraction
LA-438-114, Determination of Technetium-99 by Extraction with TEVA Resin
LA-503-157, Ammonium Analysis on DIONEX Model ICS 3000
LA-504-101: Water Leach Sample Preparation
LA-504-102: Water Leach and Moisture Content Determination of Hanford Sediments and Soils
LA-505-112: Acid Digest Preparation of Sediments, Sludges, and Soils in 11A Hot Cells for Metal Analysis by ICP-MS, ICP-AES, GFAA, and FLAA
LA-505-158: Acid Digestion/Dilutions of Aqueous Samples and Extracts for Spectroscopic Analysis of Metals
LA-505-163: Acid Digestion of Sediments, Sludges, or Soil Samples for Spectroscopic Analysis of Metals
LA-505-170: Inductively Coupled Plasma (ICP) Emission Spectrometric Method - Jobin Yvon Horiba Instruments
LA-505-171: Metals Analysis of IH Samples by Inductively Coupled Plasma Atomic Emission Spectrometry for ICP-JY
LA-505-172: Acid Digestion of IH-Related Filter, Wipe and Bulk Samples
LA-505-174, Inductively Coupled Plasma (ICP) Emission Spectrometric Method for the Thermo Scientific iCAP 6500

LA-505-564: Microwave Assisted Acid Digestion of Tank Samples For Spectrometric Analysis
 LA-506-102: Determination of Trace Elements and Radionuclides Using the PQ EXCELL Inductively Coupled Plasma-Mass Spectrometer
 LA-506-103: Determination of Trace Elements and Radionuclides Using the Agilent 7500ce Inductively Coupled Plasma-Mass Spectrometer
 LA-508-101: Alpha and Beta Samples
 LA-508-114: Operation of the Alpha Beta Counting System Using PC Control
 LA-508-121: Operation of the Beckman Liquid Scintillation Counters
 LA-508-122: Operation of the PerkinElmer Tri-Carb Liquid Scintillation Analyzer
 LA-508-124: Operation of the Alpha Beta Counting System Using PC Control and Windows
 LA-508-167: Gamma Spectroscopy
 LA-508-168: Calibration and Operation of the Ortec AEA System
 LA-510-112: Determination of Density for Free Liquid Samples
 LA-510-115: Total Dissolved Solids Determination
 LA-510-116, Density of Sludge Samples
 LA-512-106: Total Suspended Solids
 LA-512-107: Determination of Conductivity
 LA-514-115: Thermal Stability and Percent Weight Loss Using the TA DSC and TGA
 LA-519-115: Use and Calibration of the DMA 58 Digital Density Meter
 LA-519-132: Percent of Solids and Bulk Density Determinations by Centrifuge
 LA-519-151: Sample Description Protocol at 222-S
 LA-523-115: Semivolatiles and PCBs From Aqueous Samples Using Semimicro Continuous Liquid-Liquid Extraction
 LA-523-118: Volatile Organics By Closed-System Purge-and-Trap/Gas Chromatography/Mass Spectroscopy Using SW-846, Method 8260C
 LA-523-135: Semivolatile Organics By Gas Chromatography/Mass Spectrometry, Based on SW-846, Method 8270D
 LA-523-138: Soxhlet Extraction of Solid Samples for Semivolatile Organic or PCB Analysis
 LA-523-140: Polychlorinated Biphenyls (PCBs) By SW-846, Method 8082A, Using Gas Chromatography With Electron Detection
 LA-523-141: Polychlorinated Biphenyls Screening Extraction
 LA-523-144: Accelerated Solvent Extraction (ASE) of Solid Samples
 LA-523-145: Semivolatiles From Solid Samples Using Accelerated Solvent Extraction (ASE)
 LA-523-146: Polychlorinated Biphenyls Screening Analysis
 LA-523-149, Dilution of Samples for Semivolatile Organic or PCB Analysis
 LA-523-162: Organochlorine Pesticides by SW-846, Method 8081B, Using Gas Chromatography with Electron Capture Detector
 LA-523-163: Total Petroleum Hydrocarbon Screen and Semi-volatile Petroleum Product Analysis by Gas Chromatography/Flame Ionization Detection
 LA-523-165, Concentration of Organic Extracts on the TurboVap Concentrator
 LA-523-167: Organic Sample Concentration
 LA-533-101: Cation Analysis On Dionex Model DX-500
 LA-533-117: Ammonia Vapor Tube Preparation and Analysis on DIONEX Model ICS2000
 LA-533-166: Ion Chromatographic Analysis of Anions and Small Organic Acids on DIONEX Model ICS 3000
 LA-542-104: Co-Precipitation of Transuranics for Alpha Energy Analysis (AEA) Counting
 LA-544-101: Nitric Acid-Hydrochloric Acid Leach of Soil
 LA-544-108: Sample Preparation of Ammonia Vapor Tubes for Ion Chromatography Analysis

LA-544-112: Micro-distillation Separation of Ammonia for Ion Chromatographic Analysis
LA-544-113, Water Leach Sample Preparation for Radiochemistry
LA-544-135: Sub-sampling of HEPA Filters
LA-548-111: Preparation of Mounts for Scintillation Counting
LA-548-121: Preparation of Sample Mounts for Gamma Energy Analysis
LA-549-133: Nitric Acid - Hydrogen Peroxide Oxidation Of Organic Matter
LA-549-141: Fusion by Alkali Metal Hydroxide
LA-564-101: Percent Solids/Percent Water by Gravimetric Analysis
LA-695-102: Determination of Cyanide by Microdistillation and Spectrophotometric Analysis
LA-695-103: Determination of Cyanide By EDTA/En Dissolution Followed By Microdistillation And Spectrophotometric Analysis
LA-903-101 Determination of Thorium by Extraction with TEVA Resin
LA-953-104: Determination of Plutonium and Americium by Extraction with TRU Resin

Reference Material Specification Procedures

LR-120-002: Preparation of Solid Matrix Standards
LR-120-101: Preparation of Single-or Mixed-Element Standard Solutions
LR-211-111: FEAL H⁺ Standard Containing Hydrolyzable Cations
LR-218-106: Liquid Scintillation Counter Quench Curve Makeup
LR-223-101, Preparation of 89,90 Strontium by Solvent Extraction with Mixed Ligands for Beta Counting
LR-332-111: Terminal Liquor Standards
LR-378-103: Iodine Tank Standard
LR-438-101: Technicium-99 (Tc-99) and Total Activity Standards - REPLACED by LR-548-001
LR-505-104: Preparation of Metal Standard Solutions
LR-506-101: Mass Spectrometry Standards
LR-519-111: ZnCl₂ Aqueous Density Standard
LR-533-101: Ion Chromatography Standard
LR-546-101: Preparation of the Tank Fusion (TNKFUS) Standard
LR-548-001: Preparation of Radionuclide Standards
LR-549-101: Preparation of Copper Sulfate Reference Electrodes
LR-621-103: Total Carbon Standards
LR-634-101: Ammonia Standards
LR-661-101: Hydroxide and Caustic Demand Standards
LR-661-102: In Tank Solidification Hydroxide (ITSOH) Standard
LR-854-101: Radionuclide Flat-Mount Standards
LR-958-101: ENVCRB Standard Makeup